



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

September 20, 2010

Eric C. Apfelbach
Chief Executive Officer
ZBB Energy Corporation
N93 W14475 Whitaker Way
Menomonee Falls, WI 53051

Re: ZBB Energy Corporation
Registration Statement on Form S-1
Filed September 3, 2010
File No. 333-169228
Form 10-K for the Fiscal Year Ended June 30, 2010
Filed September 10, 2010
File No. 001-33540

Dear Mr. Apfelbach:

We have limited our review of your filings to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

General

1. Please revise your filing to update information to the latest practicable date. In this regard, we note disclosure regarding information at or as of March 31, 2010 in your risk factors and under the heading "Dilution."

Description of Securities, page 11

Warrants, page 11

2. In the penultimate paragraph under this heading and elsewhere in your registration statement you disclose that “[p]ursuant to the Securities Purchase Agreement, in connection with each tranche the warrant will be automatically exercised with respect to the number of shares Socius becomes entitled to purchase under the warrant in connection with the tranche.” Your use of the phrase “entitled to purchase” may suggest that Socius is not obligated to exercise the warrant with respect to the number of shares associated with each tranche. Please revise throughout your registration statement to indicate that Socius is obligated to exercise the warrant for that number of shares that vests with each tranche.

Documents Incorporated By Reference, page 19

3. We note that you have filed your Annual Report on Form 10-K for the fiscal year ended June 30, 2010. Please update your disclosure under this heading to reflect the filing of your most recent 10-K.

Form 10-K for the Fiscal Year Ended June 30, 2010

Item 9A. Controls and Procedures, page 47

4. We note your disclosure that your “principal executive officer and [your] principal financial officer concluded that, as of the end of the period covered by this annual report, [your] disclosure controls and procedures were effective, in that they provide reasonable assurance that information required to be disclosed by [you] in the reports [you] file or submit, under the Exchange Act, is recorded, processed, summarized and reported within the time period specified in the Securities and Exchange Commission’s rules and forms.” Please confirm, and revise in future filings, if true, that your officers concluded that your disclosure controls and procedures are also effective to ensure that information required to be disclosed in the reports that you file or submit under the Exchange Act is accumulated and communicated to your management, including your chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure. See Exchange Act Rule 13a-15(e).

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Ronald E. Alper, Staff Attorney, at (202) 551-3329, Catherine Brown, Staff Attorney, at (202) 551-3513, or me at (202) 551-3725 with any questions.

Sincerely,

H. Christopher Owings
Assistant Director

cc: Mark Busch, Esq.
K&L Gates LLP
Via facsimile to (704) 353-3140